Barriers to Reporting Medical Errors: A Qualitative Study in Iran

Shahram Samadi¹, Fatemeh Alipour², *Zahra Shahvari³

1. Department of Anesthesia and Intensive Care, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.
2. Eye Research Center, Farabi Eye Hospital, Tehran University of Medical Sciences, Tehran, Iran.
3. School of Nursing & Midwifery, Islamic Azad University of Ghachsaran, Ghachsaran, Iran.

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Introduction:
This study aimed to emphasize the challenges in the error reporting system as one of the professionalism codes in clinical settings in hospitals affiliated to Tehran University of Medical Sciences, Tehran, Iran.

Materials and Methods:
In total, 23 focused group discussion sessions were conducted with 85 faculty members, assistants, and interns, as well as 165 staff members in 2016. The participants were selected using a purposeful sampling method. Furthermore, the views of four faculty members were gathered again via emails in 2020 to ensure data accuracy. The extracted codes were managed using conventional content analysis through MAXQDA software.

Results:
Analysis of participants' discussions led to the identification of 105 codes, which were classified into six sub-categories and two main categories, including "barriers to reporting errors of peers" and "barriers to self-reporting errors".

Conclusion:
Most of the non-reporting errors are due to participant's concerns. Such concerns are generally the result of poor system management or are merely misunderstandings; accordingly, errors' addressing only requires gaining a person's trust. The seriousness of the system in persuading people to report errors is one of the most important ways to gain a person's trust.

Key words:
Concern, Professionalism, Reporting Error, Tehran University of Medical Sciences

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*Corresponding Author:
Ferdousy Blvd., Gachsaran, Iran. Postal Code: 75 81 86 38 76, E-mail: shahvarizahra@gmail.com
Introduction

Observance of professionalism by medical staff is necessary to attract and maintain public trust in them (1-6). In all countries, Medical Error is one of the major challenges facing the health systems. It is estimated that 3%-17% of the hospitalized patients suffer from an injury or complication that is somehow caused by an unintended event or medical error (7). Principles of Medical Error Reporting is in the spotlight in all codes of conduct and medical accreditations around the world. The code of conduct of Tehran University of Medical Sciences also lists three codes in the face of error. These three codes include "acceptance of responsibility and accountability in case of medical error", "medical error reporting" and "assisting a colleague in controlling the harm and reporting errors in cases of medical error observation". (8) Despite sufficient information, these codes are not necessarily enforced and the reported error rate is usually lower than the actual error rate (9,10). Medical Error Reporting is necessary from the viewpoint of medical ethics and gaining public trust and has a very important and undeniable role in identifying the weaknesses of the system and correcting them in order to prevent similar cases (9). In the case of a colleague’s errors, disclosure is intended to correct and prevent the repetition of the error by all persons working in the system and not to question the wrongdoer; however, people usually refuse to disclose a colleague’s error (11). Many people do not report their mistakes (12). There are many reasons for not reporting an error, which have been addressed in some articles (10-14). Most studies on the causes of error (15-17) have investigated the capacity of Medical Error Reporting in the prevention of error (18, 19) and people’s understanding of the concept of error (20, 21). The majority of the studies also have examined the attitude of nurses or nursing managers (13, 14) or nursing students (12), and only one study has examined the attitude of physicians (21) on the reasons for the error happening. It should be mentioned that no studies have investigated the reasons for not reporting the error. In one study, only the performance of staff in the face of error was investigated. None of the available studies have comprehensively examined the views of hospital staff. This qualitative study aimed to clarify the reasons for not reporting errors in clinical settings affiliated to Tehran University of Medical Sciences (TUMS), Tehran, Iran. These reasons are explained from the viewpoint of staff, learners, and faculty members in the context of Iran.

Materials and Methods

This study was part of a research project approved by the TUMS to identify the barriers to maintaining professional behavior in clinical environments using focus group discussion. This study was approved by the Ethics Committee of the TUMS, Tehran, Iran (94-02-74-29163). The data were collected during 22 focus group sessions with faculty members, residents, interns, midwives, nurses, and other clinical staff. Totally, 14 sessions were held with non-physician staff, six sessions with faculty members and residents, and two sessions with interns. The number of participants in each focus group session was 10-15 people. Accordingly, a total of 22 focus group discussions were conducted with 250 participants. The inclusion criterion was to have occupation or education degrees in one of the hospitals affiliated to the TUMS. The participants were selected using purposive sampling method. To ensure the identification of all themes, it was tried to include participants with maximum diversity regarding their age, location, and work experience (22). The sessions were conducted by two authors and lasted between 1.5 and 2 hours, and the data were collected from October 2015 to March 2016.

Acceptance of the invitation to participate was regarded as consent to participate in the study. At the beginning of each session, the research topic was introduced and the participants were assured that the content was confidential, and just the results would be reported. A list of the professional codes of conduct approved by the TUMS in 2013 was also prepared in the study. The participants were asked to review the items and express their comments regarding barriers to observing each item. Not reporting errors and barriers to it was an
item in this list. Subsequently, the participants were asked to indicate reasons for not reporting errors at their own workplace. Exploratory questions were also used in the interviews as needed. After holding 19 group discussion sessions, no new information was obtained; however, to ensure the saturation and the coverage of all affiliated hospitals in the study, two more group discussion sessions (one for faculty members and one for staff) were held in the study. The audio file of the interviews was transcribed. After careful reading of the manuscripts, the analysts tried to gain an overall sense of them. The transcripts of the interviews were then coded, and the extracted codes were managed using the conventional content analysis method through MAXQDA software (version 10). Content analysis is a clarification of textual meaning subjective data using the stages of systematic classification (23). In the qualitative content analysis, the method of coding was used to obtain categories from the data, which were distinctive from the first interview and assessed and revised through analysis of subsequent interviews. The researchers tried to reach a general sense of each interview, and they were then coded. Frequent reading of extracted codes helped to recognize similarities and differences among the textual data in order to categorize and organize them. The categories transpired by inductive thinking through careful inspection and ongoing data comparison (24). The Lincoln and Guba framework (25) was used to make sure of trustworthiness, which necessitates transparency in the research proceeding as well as the final commentary. To ensure the scientific accuracy of the study, the researchers tried not to elicit any relevant data during the analysis process and not to arrive at any unrelated data. In group discussions, they tried to establish a good interaction with the participants. In addition, the validity of the data enhanced during the research process with long-time involvement and thorough immersion in the data. The emerged codes along with the texts were examined in group meetings of the research team, and similarity was found in more than 80% of the extracted codes. Furthermore, to ensure the accuracy of the codes and categories, four other faculty members’ views were asked on the reasons for not reporting errors via email in 2020. All four participants were faculty members of the same university and had lived experience of the phenomenon. Their views were also analyzed and the obtained codes were placed in the existing categories. The extracted codes and categories were then checked with them (Member Check). They confirmed the codes and categories. Since no new data were obtained from these four interviews, the researchers made sure that the data were saturated.

Results

The mean number of staff in each group discussion session was 10.6 cases (range: 6-15 people). Moreover, the mean age of the interviewees was 42.3 years (age range 24-65 years), and the participants’ age ranged from 24 to 60 years old. Moreover, the participants’ education level varied from diploma to master’s degree for staff and from medical student to subspecialty for physicians. Finally, 105 codes and 2 main categories, including “barriers to reporting medical error of peers” and “barriers to self-reporting errors” were obtained regarding the causes for not reporting errors. Barriers to reporting errors are categorized in Table 1.

<table>
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<th>Table 1: Barriers to reporting medical errors</th>
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<td><strong>Category</strong></td>
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<td>Barriers to reporting medical error of peers</td>
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<td>Concerns</td>
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<td>Lack of confidence</td>
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<td>Barriers to self-reporting error</td>
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<td>Concerns</td>
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<td>Lack of seriousness of the system in implementing codes</td>
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**Barriers to reporting medical errors of peers**

Participants believed that they should not report medical errors of their peers because of concerns and lack of confidence. The lack of confidence in reporting the errors of others, especially if they are in a higher job position or have more work experience, and insufficient training in this area can also challenge the reporting of errors. Lack of a non-peer reporting policy, insufficient training to provide feedback to teammates, individual’s concern about the breakdown of a friendly relationship, as well as the inappropriate reaction of teammates and judgment by others were participants’ concerns.

One of the participant nurses said: "...There is no defined system for reporting non-peer error and we do not have the right action plan to know what to do when a doctor makes a mistake. For example, if he writes the wrong order, we do not dare point out his mistake, because even if we notice it, there is nothing we can do and we will suffer the pangs of conscience about the patient. The doctor shouts that you are not in a position to tell me my mistake, you just have to execute".

Another nurse said: "...Most mistakes are discovered by others. Medical error reporting is considered pulling the rug out from under people. Colleagues will be upset and will seek revenge. A friendship breaks down and you become like an enemy. If you close your eyes, the mistake will be repeated many times. It is rare for someone to realize their own mistake. When we realize it, we pass silently, concerned about weakness identification, questioning the self-confidence and criminal background ".

**Barriers to self-reporting errors**

Participants believed that "concern for legal issues", "concern for distrust of the official", and "concern for socio-cultural reasons" are the concerns of self-reporting errors. Although "Ignoring the process leads to error" and "Ignoring the human factor of error" show the lack of seriousness of the system in implementing codes.

Concern over legal issues was expressed by one of the residents: "...We are running away from medical errors. We are afraid of further follow-up. The files that are closed here can be followed for years. It is recounted among residents that something happened; for example, do not stamp or write a death certificate because someone will be taken to court after 2 years for a legal issue". Although such a thing may not really exist externally, it scares us because they cite the issue as an experience.

One of the faculty said of his concern about abuse: "...If we ask the doctor to write down what happened, stamp it, said one faculty member, we put that colleague into a cycle that is easily abused by others".

One of the nurses said of her concern about being labeled: "...The fear of being labeled is always the reason for not reporting a mistake. The courage of the wrongdoer's staff should be encouraged. One of the colleagues gave a child 160 cc instead of a 80-cc packed cell and reported it quickly. We informed the physician and fortunately, there was no problem. But the staff no longer trusts him since that event".

One physician referred to concern about the psychological effects of error on the patient and said: "...If I make a medical error that has not seriously harmed the patient, I will not say anything to the patient unless it is necessary that the patient knows, because sometimes the harm of informing the patient can be much greater than them not being aware of it. The answer to this question is not definitive because, on a case-by-case basis, it must be decided whether or not to compare the benefits and losses of information and make the final decision".

Concern over the reaction of the companions was mentioned by a faculty member: "...Obeying some codes are impossible. It is also based on society. Here, informing the patient or the patient's companion about the mistake, well, they will kill you!!! If you tell them, either you will be killed or whatever happens to the patient for the rest of his life would be considered your fault. It is not practical to tell the patient, people in Iran do not have the capacity to accept that there has been a mistake made by medical staff".

Regarding the officials' waiver of errors instead of correcting them, one of the residents said: "...The officials do not correct
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the protocol, they ignore the mistakes instead. When I see my mistake being forgiven, I do what I am asked to do. That is, ignorance of the Professionalism section”.

Another resident referred to the lack of a platform for medical error reporting: "...Professionalism is carried out within the existing conditions and context as a minimal framework. We cannot look at just one side of the issue. We have to see the problems of working conditions, space and facilities, as well as the problems of implementation. Does the current context really accept the expression of error and the wrongdoer? Certainly not”.

Discussion

Analysis of the participants' conversations about the reasons for not reporting the error led to the identification of 105 codes, which were classified into two main categories, including "barriers to reporting medical error of peers" and "barriers to self-reporting errors".

Barriers to reporting medical errors of peers

Lack of transparency of non-peer Medical Error Reporting policy, as well as insufficient training to give teammates feedback and concern were the three major reasons people cited for not reporting non-peer error. Organizations should have internal pathways for reporting errors. It is also important to educate people about the best way to report and manage peer misconduct or errors (18). It seems that clarifying the non-peer Medical Error Reporting policy and educating people about the correct feedback method can lead to the creation of organizational culture for peer reporting and ultimately alleviation of people's worries.

Barriers to self-reporting error

Concerns about "legal issues", "distrust of the official", "socio-cultural issues", and "lack of seriousness of the system in enforcing codes of professional conduct" were cited as barriers to Medical Error Reporting. Distrust of the official is one issue that results from the lack of supportive attitude of officials, which has been mentioned in other research studies as the most important reason for not reporting errors (15, 20). In a study of nurses, the reason for not reporting errors was mentioned as "fear of being reprimanded directly by the person in charge" (13). The punitive approach of healthcare practitioners is considered an obstacle against error reporting (14).

Linking all of the patient’s problems to the reported error was another concern that has been addressed in a study entitled "Exposure" (13). Concerns about questioning the team and concerns about conflicts in the department indicate the lack of accountability of the team, which Hashemi et al. (16) mentioned as the main reason for not reporting errors. Team accountability should become the main culture in teams.

Concerns about legal issues and atonement are two codes that have been repeatedly mentioned in other studies (21). In this study, socio-cultural reasons were mentioned as another reason for not reporting errors. Reasons include "fears of being condemned for disrespect and ridiculed". One physician noted that "concern about the psychological effects of error on the patient" stemmed from the prevailing culture in society that awareness of what has happened can raise the level of patient distrust and anxiety. In a study conducted by Hashemi et al., the organizational factors that led to the avoidance of reporting errors by nurses included considering the person the sole culprit, reproach, blaming, and embarrassment (16).

However, such concerns are not at all justified, and it is necessary to create an organizational culture that extends the need for error recognition and learning from the event at the managerial level (9). Concerns about labeling were another socio-cultural reason for not reporting errors in this study. In some studies, the concern of being considered incompetent by colleagues has been mentioned as a cultural consequence of Medical Error Reporting (17, 19). Anousheh also mentioned the fear of being labeled as incompetent and the fear of being reprimanded as the domain of fear of reporting consequences (26).

Concern about the reaction of patient companions was a further socio-cultural reason in this study. This finding was in line
with the findings of a study conducted by Movahednia. They believe that fear of reprimand by managers, co-workers' reactions and fear of patients' legal complaints can play an effective role in nurses' failure to report errors (13). However, the concern of the patient companions is a finding in this study that is very intriguing and highlights the need for widespread culturalization in the community. Concern about patient distrust has been cited in other studies as a factor in the failure to report errors (17). Managers may need to think about other ways to disclose the error to the patient.

The kind of worry that comes from reporting the medical error of peers is different from the kind of worry that comes from self-reporting errors. Concerns about mistreatment by peers can be reduced by teaching feedback and Medical Error Reporting, while concerns about self-reporting are those related to distrust of laws, authorities, and the community that requires gaining people's trust.

This trust is gained by the seriousness of the system in executing the professional code of conduct.

There is no doubt that reporting an error and accepting the consequences is stressful. Perhaps many of the codes mentioned in this study are actually justifications for escaping these stresses. However, paying attention to the reasons mentioned for Medical Error Reporting and including them in the training of Medical Error Reporting method will certainly correct the wrong behavior pattern in the long run.

Professional conduct codes about error reporting are not enforceable unless a proper platform is provided for reporting oneself and one's teammates. Creating a suitable platform for Medical Error Reporting seems to require initial training, continuous monitoring, accountability and support of the system and officials, as well as the elimination of common concerns and misunderstandings in this regard. In-hospital culturalization at the community level will improve error handling; moreover, team accountability should become a culture in teams.

One of the strengths of this study was conducting a member check in 2020 five years after data collection. The presence of concordance in categorization in 2020, compared to that in 1995, showed that the data have been analyzed correctly; however, since the opinions of people about Medical Error Reporting have remained unchanged for five years, organizational culture has not changed and possibly reporting proxies are incorrect.

**Limitations of the study**

Since this was a qualitative study, the findings were limited to the participants' extent of revelation and interest in talking about the phenomenon. Moreover, there have been no claims about the generalizability of the results.

**Conclusion**

The lack of seriousness of the system in persuading people to report errors as one of the codes of professionalism is one of the most important reasons for individuals not reporting them. Much of the failure to report errors is due to various concerns. These are generally the result of poor system management or people's misunderstandings. The seriousness of the system in implementing a professional code of conduct seems to alleviate this concern. The first step of the system in gaining people's trust is to appreciate the person who reports his/her mistake as a professional, someone who is eager for personal excellence. The creation of a culture of error expression as a factor for individual and team excellence, as well as a platform for reporting self-and/or peer, is an action that is effective in the long run.

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